

AMENDMENTS TO THE CLAIMS

1. (**Currently Amended**) A fusion protein of pyrroloquinoline quinone glucose dehydrogenase (PQQGDH) and a cytochrome, wherein the cytochrome has been fused to the C-terminal side of PQQGDH, and wherein the PQQGDH is either (a) or (b):

(a) a protein comprising an amino acid sequence represented by SEQ ID NO: 2;

(b) a protein comprising an amino acid sequence in which one or more amino acid residues have been deleted, substituted or added in the amino acid sequence (a) and having a glucose dehydrogenase activity and an electron transfer ability, and wherein the cytochrome is cytochrome c or cytochrome B562.

2-4. (Cancelled).

5. (Previously Presented) The fusion protein according to Claim 1, wherein the cytochrome is derived from a quinohemoprotein which is a protein having both PQQ and a heme in one molecule.

6. (Previously Presented) The fusion protein according to Claim 1, wherein the cytochrome is derived from a quinohemoprotein alcohol dehydrogenase.

7. (Previously Presented) The fusion protein according to Claim 1, wherein the cytochrome is derived from quinohemoprotein ethanol dehydrogenase from Comamonas testosteroni.

8. (Cancelled).

9. (Withdrawn) A gene encoding the fusion protein according to Claim 1.

10. (Withdrawn) A vector containing the gene according to Claim 9.

11. (Withdrawn) A transformant containing the gene according to Claim 9.

12. (Withdrawn) A transformant in which the gene according to Claim 9 has been integrated into its main chromosome.

13. (Withdrawn) An enzyme electrode comprising the fusion protein according to Claim 1 attached thereto.

14. (Withdrawn) A method of measuring the glucose concentration in a sample comprising the steps of:

contacting the sample with the enzyme electrode according to Claim 13; and
measuring electrons generated from the oxidation of glucose.

15. (Withdrawn) A glucose sensor comprising an enzyme electrode according to Claim 13 as a working electrode.